



2005

SOLAR DECATHLON



19 TEAMS, 10 CONTESTS, *and* WE ALL WIN

Originally conceived in 1999, the simple idea to test the power of the sun in 10 contests grew into one of the most ambitious and inspiring events in the country — the Solar Decathlon.

The 2005 Solar Decathlon will challenge 19 college teams from around the globe in 10 contests to see which team can design, build, and operate the most livable and energy-efficient completely solar-powered house. And, while the competition will crown a first-place finisher, this truly is a competition we *all* win. The students will demonstrate through their work winning choices about living with abundance, style, and comfort using only the power of the sun. That's the promise of the Solar Decathlon.

The Competition

The 2005 Solar Decathlon will be the second competition sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy with partners the National Renewable Energy Laboratory, The Home Depot, and the American Institute of Architects. With the support of the sponsors, the students are pursuing solar engineering and design excellence, and will prove that the time for solar energy is now!

Like the sensible dwellings from years gone by, today's solar houses connect with nature to take advantage of heat and light from the sun, as well as cooling breezes and shading. But these homes take those low-tech, natural advantages and crank them way up. Solar Decathlon homes combine proven design solutions with the latest high-tech products to create homes that not only reduce utility bills, but also meet their own energy needs and powerfully improve on all the comforts of home.

In fall 2005, student teams will transport their completed solar homes from campus to the

National Mall in Washington, D.C., creating a "Solar Village," born from their imaginations and creativity. This village will show we can live our modern lifestyle, where we work hard, move fast, and demand convenience and comfort, while using less energy.

To deliver on that promise, the students will spend more than a year building their 800-square-foot homes and preparing for the competition. During the 10-day competition, students will test their homes in contests encompassing all the ways we use energy in our daily lives. Contests range from architecture, livability, and comfort to how well the homes perform tasks such as heating water and powering appliances. And, each team must provide enough solar electricity to power an electric car. The winner of the Solar Decathlon will be the team that best blends aesthetics and modern conveniences with maximum energy production and optimal efficiency.

Today's Students, Tomorrow's Leaders

While the sun is the namesake of the competition, the students and their amazing work are the cornerstone of the event. Today's students are tomorrow's engineers, architects, entrepreneurs, and homeowners — and the Solar Decathlon will encourage them to incorporate solar energy into their future careers and personal lives.

Just like the Olympic decathletes, the students will draw on all of their strengths, including design and architecture, engineering and performance, and education and promotion. The teams will rely on expertise from all disciplines as they spend months fund raising, planning, designing, analyzing, and finally building and improving their homes. The future engineers will collaborate with the future architects to create houses that are designed not only to look beautiful but to perform beautifully too.

The Solar Decathletes have a big job ahead of them, and they will tackle the job with energy, ingenuity, and perseverance. The students will learn a tremendous amount from the competition and inspire the world to imagine a brighter future.



Capturing the Imagination of a Nation

While the Solar Decathlon is primarily a student competition, it is also a living laboratory where concept meets reality. Visitors are welcome to stroll through the Solar Village and see first hand the solar energy and energy efficiency technologies available today.

The inaugural Solar Decathlon in 2002 attracted a large and enthusiastic public crowd, with more than 100,000 people visiting the competition. Testimonials included "Outstanding. The homes of the future are here today" and "Absolutely terrific display. There are some wonderful ideas here."

Visitors toured the Solar Village and learned strategies to reduce their consumption of fossil fuels and to lower their utility bills. Visitors also learned that using renewable energy sources,

such as solar, can help increase domestic energy security.

The 2002 competition also attracted exceptional media attention and was covered by many of the nation's most distinguished and well-known media organizations. Hundreds of stories appeared in newspapers, magazines, and on the Internet in publications including *The New York Times*, *The Washington Times*, the *Washington Post*, and the *Los Angeles Times*. The inaugural event also garnered 45 known television and radio stories, highlighted by a story on *Today* on NBC, the nation's top-ranked morning news show, as well as stories on *National Public Radio* and by the *Associated Press* network.

Also during the competition, more than 20,000 people visited the Solar Decathlon Web site each day (www.solardecathlon.org) to track their favorite team, view daily photos, and learn more about solar energy and energy efficiency. In all, the Web site received nearly 3 million hits.

the 2005 SOLAR DECATHLON TEAMS

- California Polytechnic State University – San Luis Obispo
- Carnegie Mellon, The Art Institute of Pittsburgh, and University of Pittsburgh
- Concordia University and Université de Montréal
- Cornell University
- Crowder College
- Florida International University
- New York Institute of Technology
- Rhode Island School of Design
- Universidad Politécnica de Madrid
- University of Colorado – Denver and Boulder
- University of Maryland
- University of Massachusetts – Dartmouth
- University of Michigan
- University of Missouri – Rolla and the Rolla Technical Institute
- University of Puerto Rico – Mayagüez
- University of Southern California
- University of Texas at Austin
- Virginia Polytechnic Institute and State University
- Washington State University



FOR MORE INFORMATION

Web site: www.solardecathlon.org

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2002 WINNERS

The University of
Colorado – Boulder
1st Place



The University of Virginia
2nd Place

Auburn University
3rd Place



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